MODUL 6

PRACTICUM

NAMA   : MAHARDHIKA BATHIARTO DIM ZARITA

NIM   : L200184134
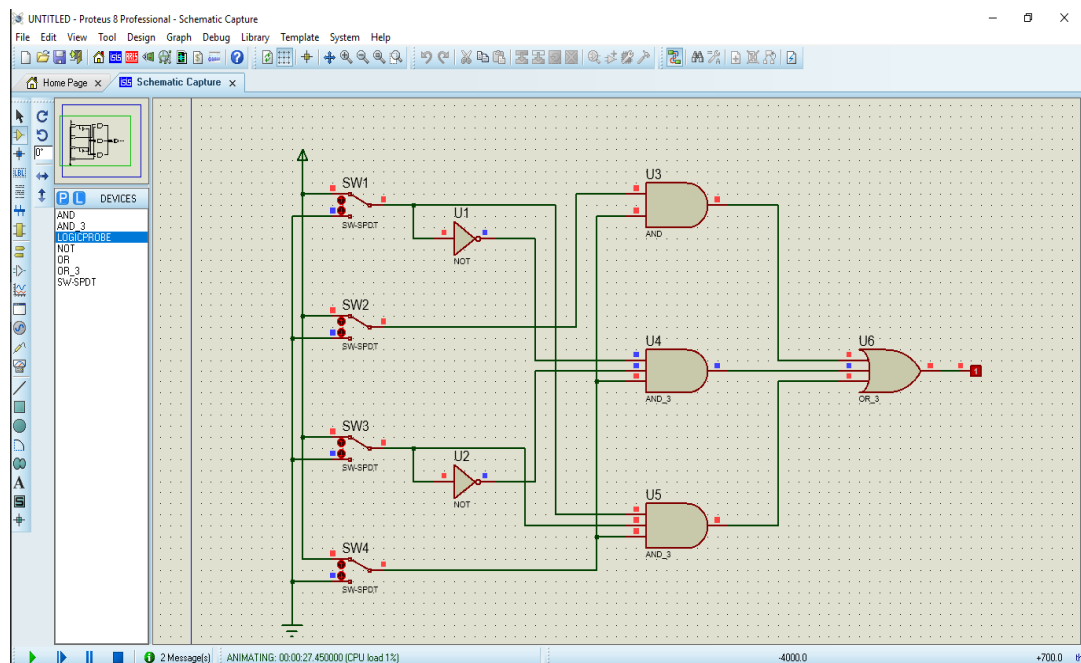
CLASS   : X

Test 1.

1. Karnaugh Map.

		AB			
		00	01	11	10
CD	00	0	0	0	0
	01	1	1	1	0
	11	0	1	1	1
	10	0	0	0	0

2. F = **(B.D) + (A'.C'.D) + (ACD)**
3. Logic gate from Boolean function.

Test 2.

1. Karnaugh Map.

		AB			
		00	01	11	10
CD	00	1	0	0	1
	01	0	1	1	0
	11	0	1	1	0
	10	1	0	0	1

2. F = (**B.D**) + (**B'.D'**)
   F = **(B'+D).(B+D')**

3. Logic gate from Boolean function.
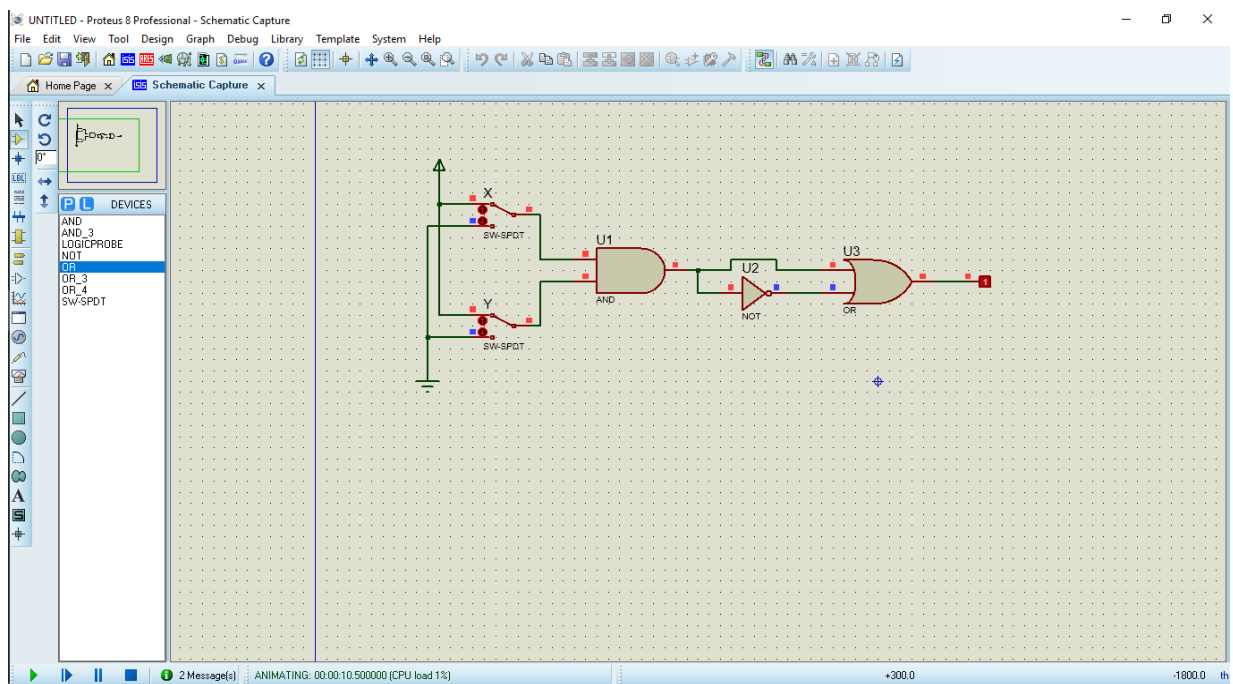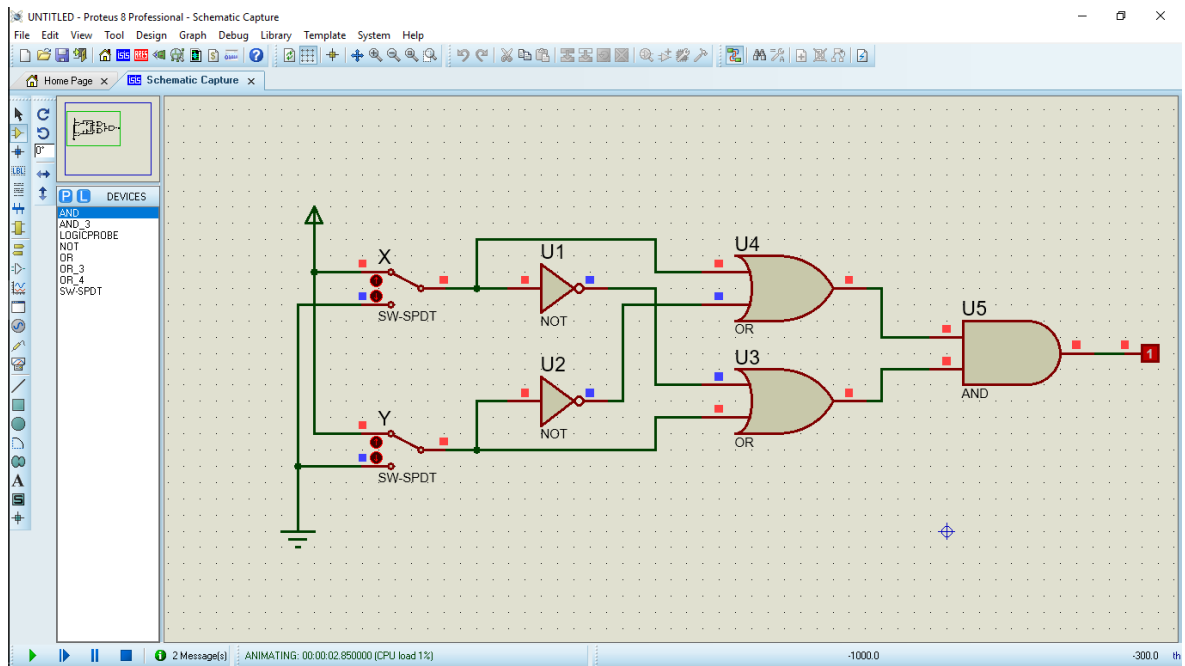
Test 3.

1. Boolean function : F = XYZ + XYZ' + XY'Z + X'YZ + X'YZ' + XY'Z' + X'Y'Z'
2. Karnaugh Map.

		XY			
		00	01	11	10
Z	0	**1**	**1**	**1**	**1**
	1	**0**	**1**	**1**	**1**

3. F = **Z' + Y + X**
4. Logic gate from Boolean function.
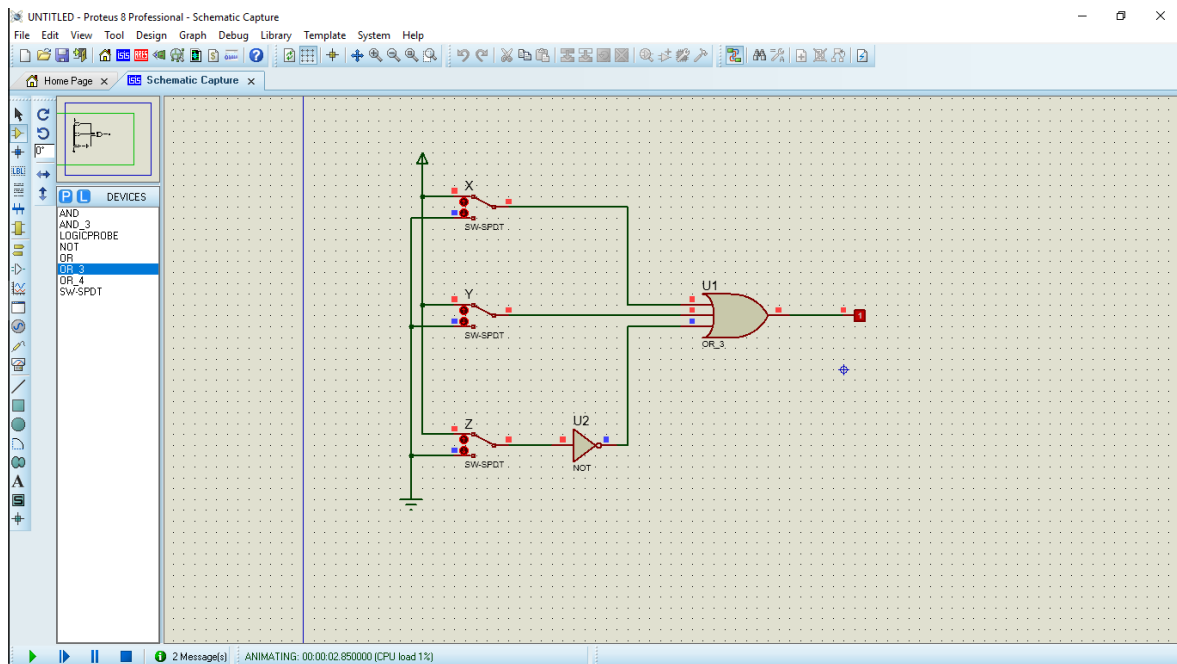
Test 4.

1. Karnaugh Map.

		AB			
		00	01	11	10
CD	00	**0**	**0**	**0**	**0**
	01	**1**	**1**	**1**	**0**
	11	**0**	**1**	**1**	**1**
	10	**0**	**0**	**0**	**0**

2. F = AD' + BC'D' + AB + BCD
3. Logic gate from Boolean function.
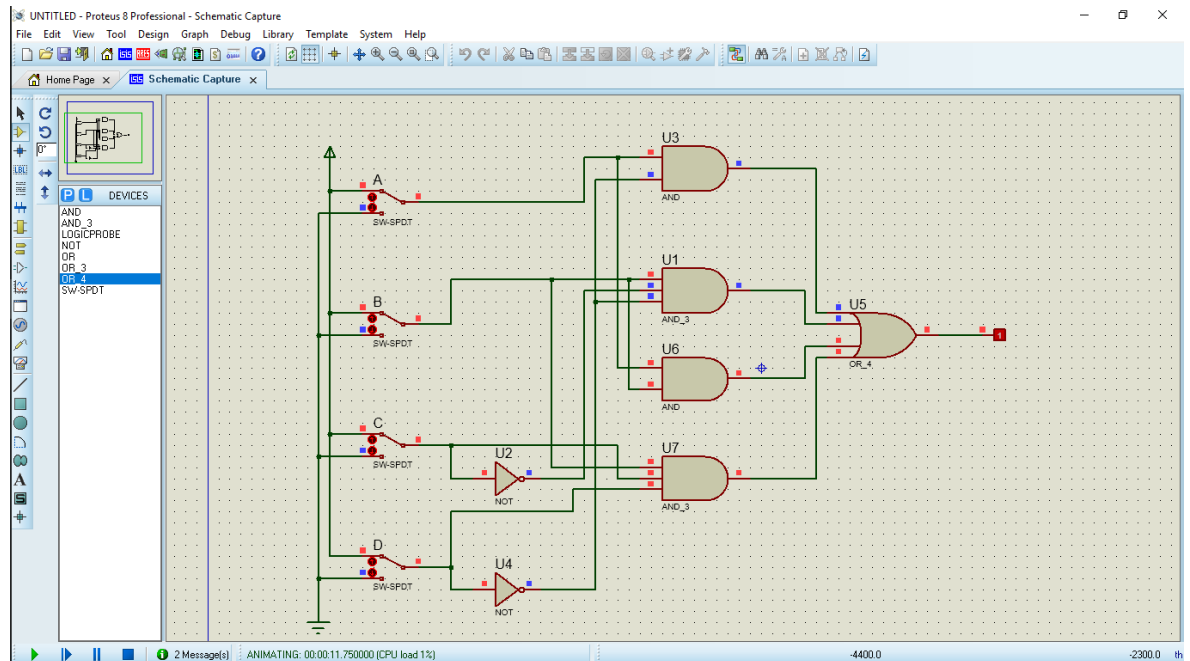
Test 5

1. Table of Boolean function

A	B	C	D	F
0	0	0	0	**1**
1	0	0	0	0
0	1	0	0	0
1	1	0	0	**1**
0	0	1	0	**1**
1	0	1	0	**1**
0	1	1	0	0
1	1	1	0	0
0	0	0	1	**1**
1	0	0	1	**1**
0	1	0	1	0
1	1	0	1	**1**
0	0	1	1	**1**
1	0	1	1	0
0	1	1	1	**1**
1	1	1	1	0

2. According of table Answer this karnaugh table.

		AB			
		00	01	11	10
CD	00	**1**	**0**	**1**	**0**
	01	**1**	**0**	**1**	**1**
	11	**1**	**1**	**0**	**0**
	10	**1**	**0**	**0**	**1**

3. Simplify Boolean function

F = **(A'.B') + (A'.C.D) + (A.B.C') + (A.C'.D)**

4.